



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,497	10/17/2003	Brett D. Whitmer	03004812US	1970
25096	7590	11/23/2005		
PERKINS COIE LLP PATENT-SEA P.O. BOX 1247 SEATTLE, WA 98111-1247			EXAMINER NGUYEN, TRINH T	
			ART UNIT	PAPER NUMBER
			3644	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,497

Applicant(s)

WHITMER ET AL.

Examiner

Trinh T. Nguyen

Art Unit

3644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Election dated 9/15/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 31-37 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 14-20, 31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13, 21-26 and 33-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 9-12 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/15/05.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,2-6,8,13,21-24,33-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Spofford et al. (US5320307; please see Figures 2 and 3 attached at the end of this Office Action for further explanation).

For claims 1 and 21, Spofford et al. disclose an aircraft system comprising:

a wing;

an external structure positioned proximate to the wing; and

a unitary fitting attached to the wing and configured approximately all of the primary loads from the external structure to the wing, the primary loads including pitch loads and side loads, the unitary fitting including a first portion and a second portion, the first portion having at least a first attach feature and the second portion having at least a second attach feature spaced apart from the first attach feature, the first attach feature being configured to transfer at least a portion of the pitch loads from the external

Art Unit: 3644

structure to the wing, and the second attach feature being configured to transfer at least a portion of the side loads from the external structure to the wing.

For claims 2, 3, and 22, Spofford et al. disclose it is inherently that Spofford et al.'s system comprises the wing includes a front spar and a wing skin portion extending aft from the front spar. It is noted that the recitation such as "configured to" do not further limit to any patentable sense since the recitation is not positive limitation but only require the ability to so perform. Therefore, it is noted that Spofford et al.'s first and second portions are configured to be/capable of fixedly attached at least proximate to the front spar and Spofford et al.'s second portion is configured to be/capable of fixedly attached at least proximate to the wing skin portion.

For claim 4, Spofford et al. disclose the first portion of the fitting further includes a third attach feature spaced apart from the first attach feature and coupled to the external structure, the third attach feature configured to transfer at least a portion of the pitch loads from the external structure to the wing.

For claim 5, Spofford et al. disclose the first portion of the fitting further includes a third attach feature spaced apart from the first attach feature, wherein the first attach feature includes a first bore coupled to the external structure and the third attach feature includes a second bore coupled to the external structure, and wherein the second portion of the fitting further includes a fourth attach feature spaced apart from the second attach feature, wherein the second attach feature includes a third bore coupled to the external structure and the fourth attach feature includes a fourth bore coupled to the external structure.

For claim 6, Spofford et al. disclose the third and fourth bores are at least generally aligned along a common axis.

For claim 8, Spofford et al. disclose the external structure includes an engine (note that Spofford et al.'s engine can be considered as a propulsive engine).

For claim 13, it is inherently that Spofford et al.'s system comprises a fuselage wherein the wing extends outwardly from the fuselage.

For claim 23, Spofford et al. disclose the unitary body is formed from a single piece of metal.

For claim 24, Spofford et al. disclose the unitary body is formed by fixedly attaching a first body portion to at least a second body portion.

For claims 33 and 34, Spofford et al. disclose the first portion of the unitary fitting further includes a third attach feature spaced apart from the first attach feature, and wherein the aircraft system further comprises: a first structural member/a first pitch strut (32) extending between the external structure and the first attach feature; and a second structural member/a second pitch strut (30) spaced apart from the first structural member/a first pitch strut and extending between the external structure and the third attach feature, wherein the third attach feature is configured to transfer at least a portion of the pitch loads from the external structure to the wing.

For claim 35, Spofford et al. disclose the first portion of the unitary fitting further includes a third attach feature spaced apart from the first attach feature, wherein the first attach feature includes a first bore coupled to the external structure by a first pin, and wherein the third attach feature includes a second bore coupled to the external

Art Unit: 3644

structure by a second pin; and wherein the second portion of the unitary fitting further includes a fourth attach feature spaced apart from the second attach feature, wherein the second attach feature includes a third bore coupled to the external structure by a third pin, and wherein the fourth attach feature includes a fourth bore coupled to the external structure by a fourth pin.

For claim 36, Spofford et al. disclose the first attach feature is configured to be attached to a first structural member (32) extending between the first attach feature and the external structure, and wherein the first portion of the unitary body further includes a third attach feature configured to be attached to a second structural member (30) extending between the third attach feature and the external structure.

For claim 37, Spofford et al. disclose the first attach feature is configured to be attached to a first pitch strut (32) by a first pin, and wherein the first portion of the unitary body further includes a third attach feature configured to be attached to a second pitch strut (30) by a second pin, wherein the first and second pitch struts extend between the external structure and the first portion of the unitary body.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3644

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spofford et al. (US5320307) in view of Applicant's Admitted Prior Art (as set forth in paragraphs [0002] to [0006] and Figures 1 & 2; hereinafter is referred to as AAPA).

Spofford et al. lack the body includes at least one crack inhibiting mechanism positioned adjacent to at least one of the first and second attach features, wherein the crack inhibiting mechanism is configured to arrest crack propagation from proximate to one of the first and second attach features to proximate the other one of the first and second attach features. However, AAPA discloses in lines 3-9 of col. 10 of the specification that the use of crack inhibiting mechanism is old and well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the system of Spofford et al. so as to include the use of crack inhibiting mechanism, in a similar manner as taught in AAPA, since it is old and well known technique performed in the art.

6. Claim 7 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spofford et al. (US5320307).

It is noted that Spofford et al. disclose that the first and third bores are at least generally parallel and the second and fourth bores are at least generally parallel. However, Spofford et al.'s first and second bores are not at least generally parallel and the third and fourth bores are not at least generally parallel. It would have been an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to have modified the system of Spofford et al. so as to include the first and second bores are at least generally parallel and the third and fourth bores are

Art Unit: 3644

at least generally parallel, since it appears that the arrangement of Spofford et al.'s bores seems to perform equally well.

Response to Arguments

7. Applicant's arguments with respect to claims 1-8,13,21-26,33-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh T. Nguyen whose telephone number is (571) 272-6906. The examiner can normally be reached on M-F (9:30 A.M to 6:00 P.M).

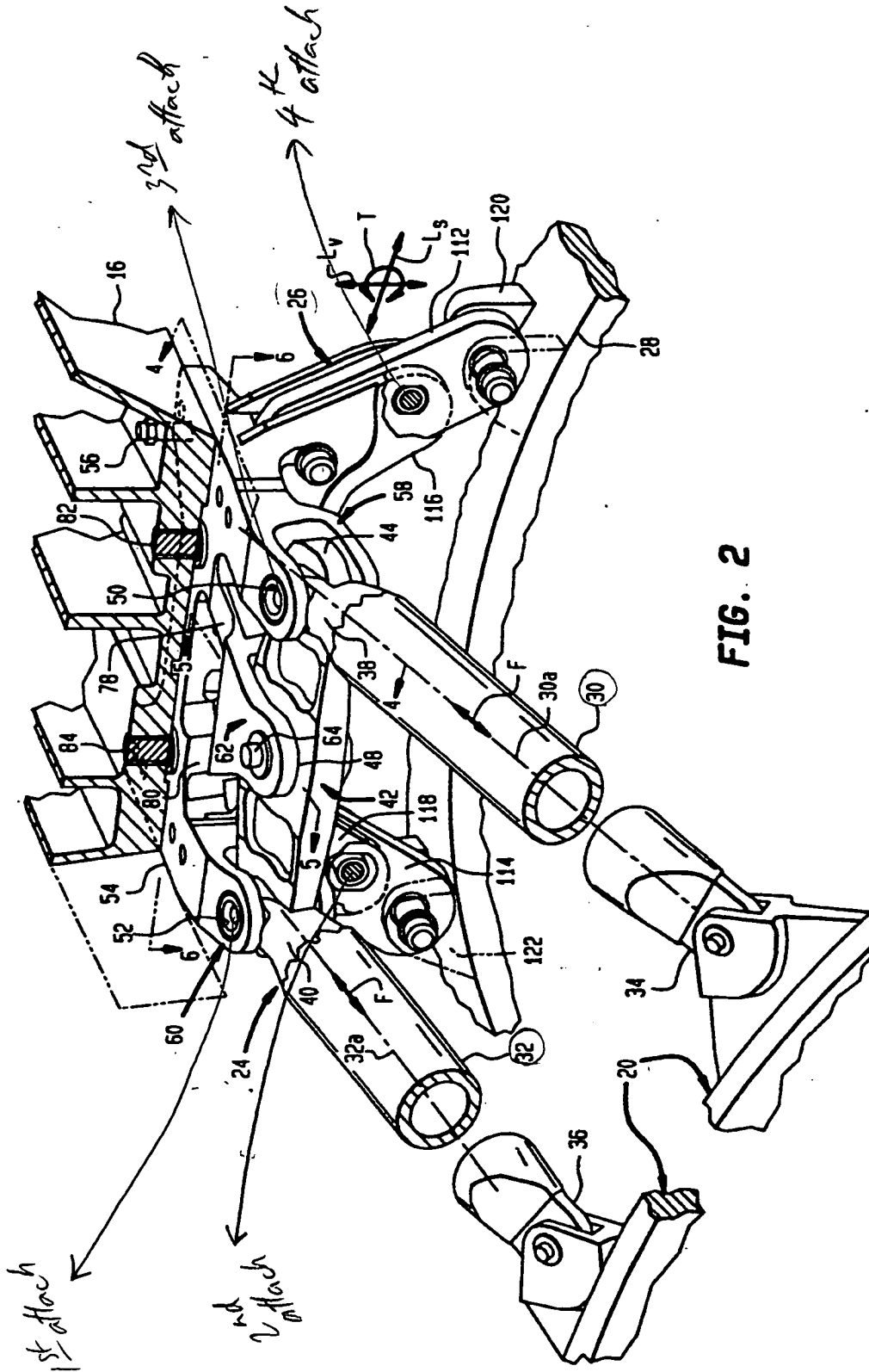
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on (571) 272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Trinh T Nguyen
Primary Examiner
Art Unit 3644

11/16/05



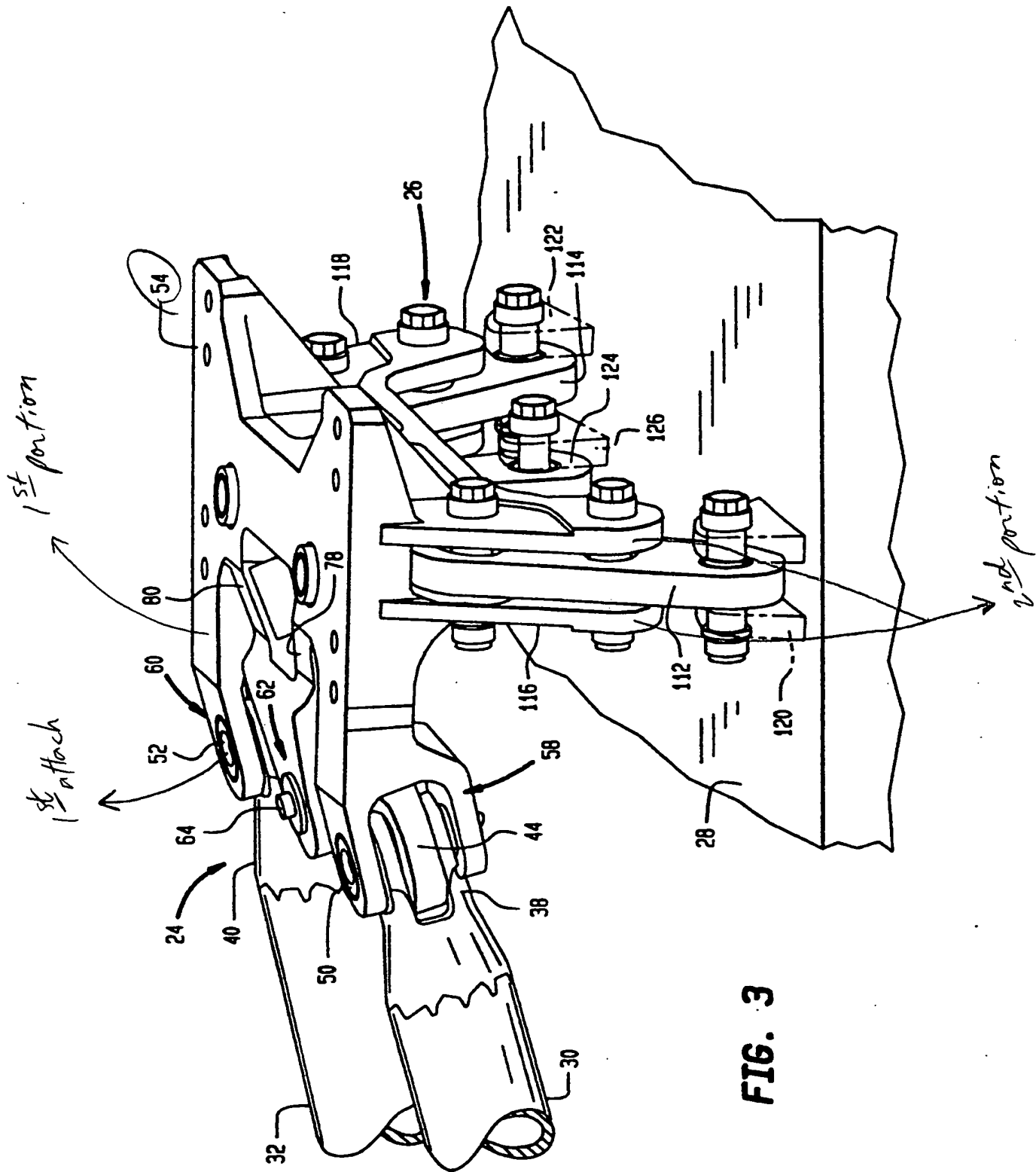


FIG. 3